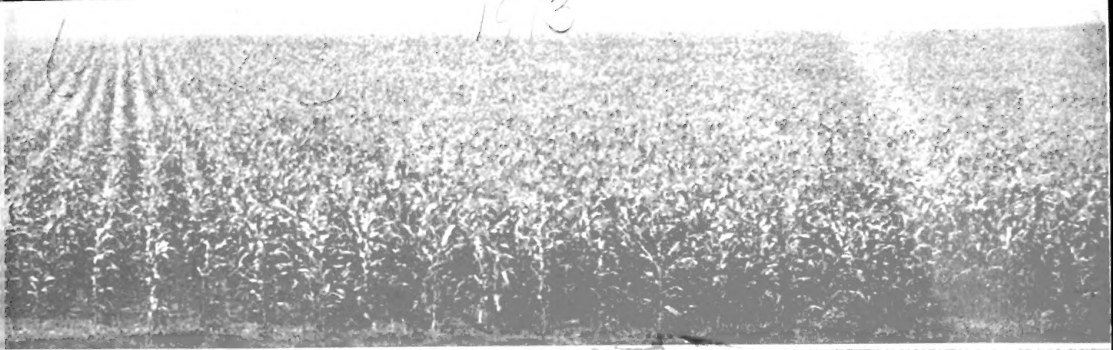


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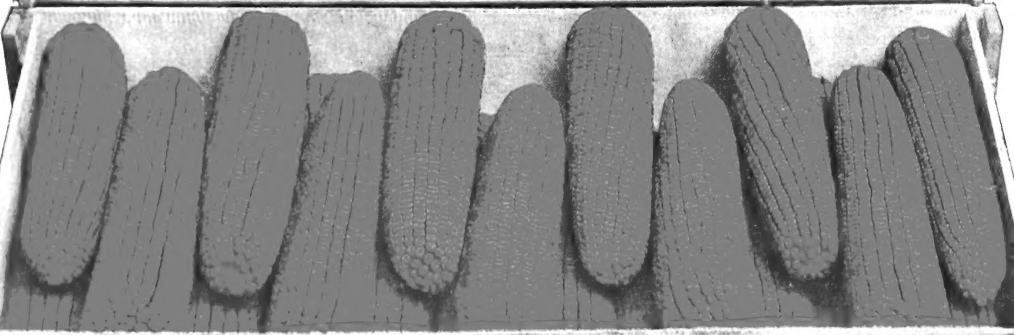
FUNK BROS. SEED CO.

BLOOMINGTON, ILLINOIS

Sole Producers of

FUNKS HIGH YIELDING SEED CORN

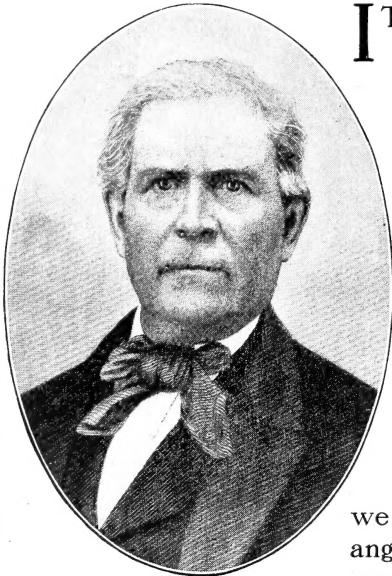
Variety	YELLOW DENT
Strain No.
Germination
Packed by
Inspected by



Funks Way

Larger Yields for the Farm

To those who are interested in Producing More Corn and other Grains and Grasses we present this our eleventh annual **Book on Corn**



ISAAC FUNK
Founder of the Funk Farms 1824

IT WILL pay you to read this book carefully whether you are one of our customers or not. In it we have attempted to describe both by photograph and with the pen how we breed, gather, cure, dry, sort, inspect and store our *high-yielding* farm seeds.

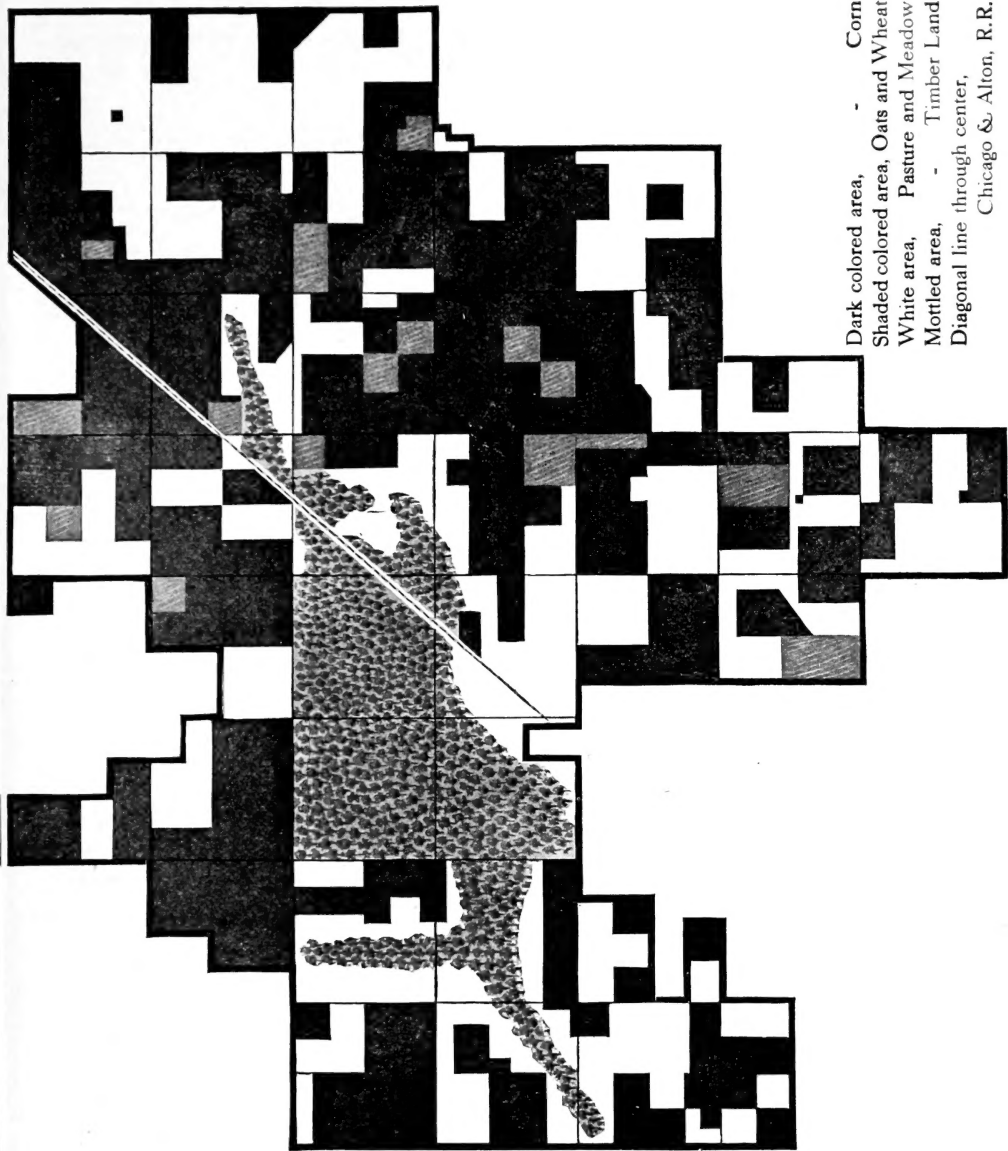
We realize that comparatively few have any direct knowledge of the vast amount of time, energy and expense that is attached to an enterprise of this kind when conducted along the lines that we have adopted.

Being the originators of Commercial Corn Breeding on a large scale, we have had to "blaze the way" at every angle. We do not deny that we have many followers and we welcome them, and say to them, "Come on boys, there is room for us all," but it is well known that FUNK BROS. SEED CO. are the pioneers and the leaders. We feel that we know both the theoretical and practical methods of corn breeding and we practice on our seed farm exactly what we describe in this book.

Our ambition is to breed the best *High Yielding Seeds* and we have proof of our reward, when 1600 customers each write us a personal letter to the effect that the seed corn we sent them last year produced an average yield of 15 bushels *more* corn to the acre, than they otherwise would have raised had they not purchased of

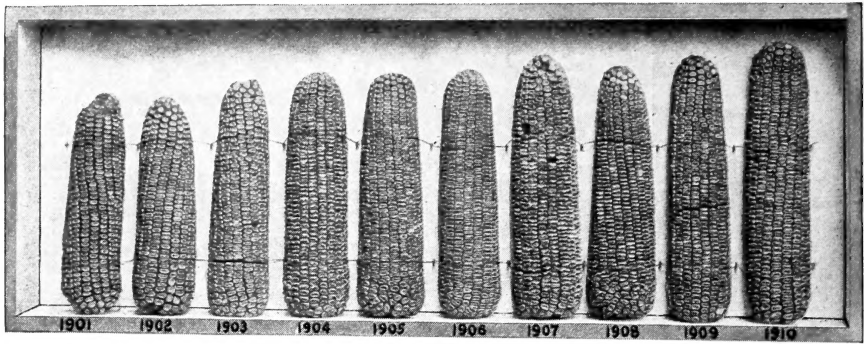
FUNK BROS. SEED CO.

BLOOMINGTON, ILL.



Dark colored area, - Corn
 Shaded colored area, Oats and Wheat
 White area, Pasture and Meadow
 Mottled area, - Timber Land
 Diagonal line through center,
 Chicago & Alton, R.R.

Funk Bros. Seed Co. Farms
 25,000 Acres



Ten Years of Corn Breeding

On the following seven pages we print a copy of an address which was given by one of the members of Funk Bros. Seed Co. before the Illinois Corn Growers' Convention, at Urbana, Illinois, and again before the American Breeders' Association, Washington, D.C. This address was also printed in a recent issue of the American Breeders' Magazine

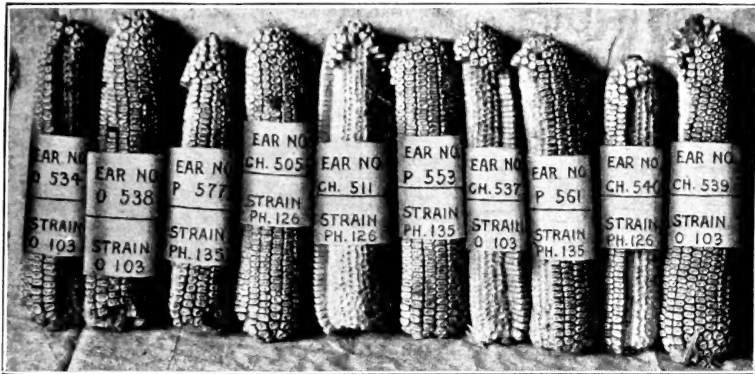
THAT little kernel, corn, capable of springing forth into a beautiful living plant and growing to a height of twelve or more feet within the short period of ninety days, and what it greater still, being able to reproduce itself over 1000 fold during one short season, surely ought to be talked more about, its characteristics and habits studied, until we have learned many things yet unthought of. The farmer of the Corn Belt has scarcely begun to realize the possibilities and necessities that lie before him in order to meet the future demands for corn.

No two ears of corn are exactly alike, yet it is found that within varieties there exist certain strains or families. Breeding corn is simply carrying out nature's own methods, but in addition one must keep a record of each individual plant or set of plants resulting from certain ears. By selection we are enabled to increase certain desirable qualities and thus we bring about the tendency of each succeeding generation to become more uniform and fixed in its certainty to reproduce these qualities.

What the Ear-to-Row Method Reveals

On planting the kernels of corn from a given mother-ear in a single row, that row or progeny will invariably have a certain degree of individuality throughout the season and show a contrast with other rows similarly planted. It may be that this particular row will germinate almost perfectly, out-grow the neighboring rows completely and at gathering time having ears of uniform size and few nubbins outyield all others in the field. Yet the selection of the

original ears for planting may have been made with the greatest care to have them all as nearly uniform as possible. The treatment through the season for each row may be identically the same and the chances for any variation in fertility of the soil reduced to the minimum. The very next row of this vigorous and high-yielding row of corn may represent the opposite extreme, poor germ-



Mother Ears—Only One-half of Which is Planted the First Year. The Next Year the Remainder of the Highest Yields are Planted in a Breeding Block by Themselves. Thus we Concentrate the Blood of the Strongest and Most Vigorous Plants.

ination, weakly, perhaps of a pale green color through the season and giving a very small yield. Notes are taken of these different rows of corn during the growing season. Previous to the time of pollenization all tassels of weak and undesirable stalks are removed to prevent the pollen from the inferior stalks fertilizing the more vigorous plants. All ears and rows bear individual num-



Strength of Individual Stalks. Results of Difference of Vitality of Two Mother Ears. By Testing Individual Mother Ears Side by Side and Under Similar Conditions, We are Able to Discover and Eliminate the Undesirable Strains.



Selecting the Best Ears: Three Stalks in the Hill and Uniform Height of Ear on Stalk. Thus a stalk has to make good by supporting a good ear while it is drawing its fertility from the ground in competition with two stalks in the hill.

bers which are recorded in a book especially prepared for this purpose. Each row is husked separately and the corn weighed. By this means we secure the yield per acre of the progeny of each mother ear.

From the rows yielding at the highest rate per acre, thus showing their mother ear to have the highest producing power, we save the best corn for the next year's breeding plot. These ears are selected from hills which contain three stalks in order that each ear selected may have been grown under the same

Breeder BREEDING BLOCK NO. 7 B.F. FUNK
 Farming BOONE COUNTY SPECIAL
 State ILL. HIGH PROTEIN

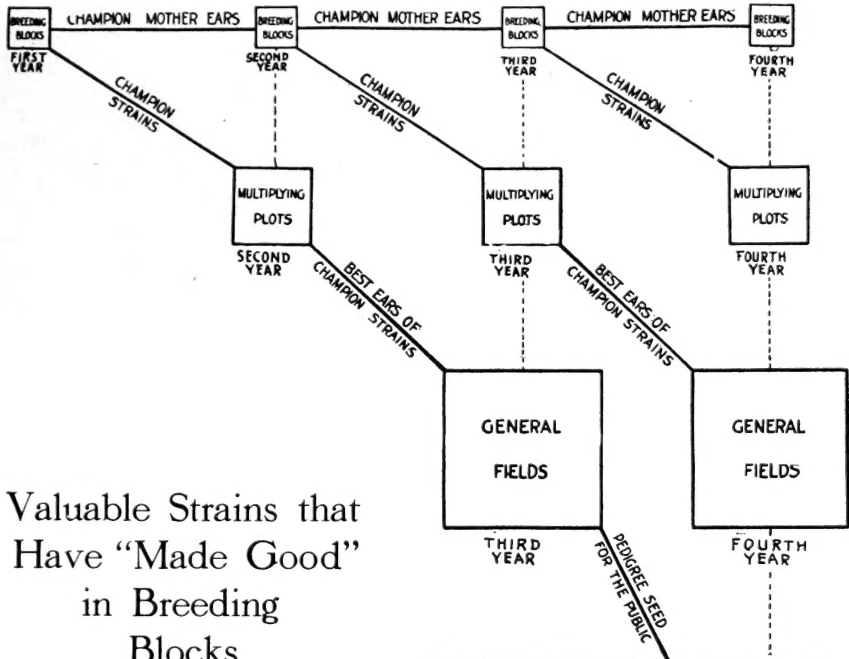
CORN REGISTER
 OF EARS PLANTED AND ROWS HARVESTED
 IN SEASON OF 1933

Distance between hills 30" _____
 Number of hills in row _____

Planting Year	Row No.	Date Planted	Date Harvested	Length of Ear	The Choice Ear	DESCRIPTION OF INDIVIDUAL SEED EARS										PERFORMANCE RECORD OF FIELD ROWS							
						Planting Date	Harvesting Date	Length of Ear	The Choice Ear	Planting Date	Harvesting Date	Length of Ear	The Choice Ear	Planting Date	Harvesting Date	Length of Ear	The Choice Ear	Yield per Acre	Moisture	Protein			
P. 201	201	8.11	7.24	7.10	7.40	22	55	57	6.50	1.75	3.05	4.30	11.30	135	1	338	415	76.8	378			18.2	
P. 202	202	8	7.65	9.30	7.50	8.10	23	50	58	7.75	2.50	4.00	4.85	11.00	150	2	249	236	77.5	260			15.2
P. 203	203	8	7.67	3.80	7.00	7.50	24	57	55	8.50	2.19	3.95	4.80	11.14	192	3	369	401	75.3	380			15.2
P. 204	204	8.10	7.41	8.30	7.75	8.10	25	57	53	15.20	2.85	4.20	4.25	10.87	152	4	439	462	63.8	445	11.60	5.00	18.4
P. 205	205	8.13	7.11	3.40	8.00	8.50	26	55	56	20.00	2.15	4.10	4.65	12.02	163	5	330	275	79.7	238			16.5
P. 206	206	8.13	7.16	0.50	3.40	7.80	27	57	52	6.50	1.85	3.80	4.25	13.08	172	6	334	399	86.2	314			17.0
P. 207	207	8.14	7.25	8.15	6.50	7.20	28	53	50	13.70	1.75	3.50	3.70	14.37	199	7	434	512	95.1	457			14.8
P. 208	208	8.14	7.30	8.60	7.00	7.20	29	54	55	3.80	1.90	3.50	3.70	11.31	201	8	470	484	84.0	359	11.25	5.00	20.0
P. 209	209	8	7.90	9.30	7.80	7.75	30	48	52	7.50	2.05	4.15	4.25	11.62	181	9	347	374	84.8	381			18.3
P. 210	210	8.14	7.69	9.20	7.25	7.40	31	50	56	6.00	2.00	3.85	4.50	11.29	187	10	517	372	75.1	397			12.9
P. 211	211	8.13	7.12	9.30	7.55	8.00	32	53	58	9.50	2.15	4.20	4.75	12.73	134	11	234	196	77.7	258			15.2
P. 212	212	8.14	7.58	8.80	7.45	7.90	33	57	4.30	2.40	4.25	4.50	14.01	181	12	496	420	12.8	479	11.10	4.50	16.2	
P. 213	213	8.14	7.28	0.50	3.90	8.00	34	58	52	11.25	2.10	4.10	4.25	11.86	173	13	385	363	99.1	369			13.0
P. 214	214	8.14	7.04	9.28	7.45	7.75	35	48	52	15.30	2.00	3.90	4.45	14.73	182	14	324	304	79.6	298			17.4
P. 215	215	8.14	7.01	8.80	7.2	7.75	36	59	52	7.50	2.15	3.75	4.35	11.05	171	15	302	400	91.7	402	11.63	4.50	15.3
P. 216	216	8.14	7.17	9.00	7.95	8.30	37	50	57	18.20	3.20	4.10	4.80	13.48	159	16	379	331	99.1	350			17.2
P. 217	217	8.14	7.60	9.10	7.18	7.45	38	49	53	15.20	2.20	4.15	4.45	10.95	185	17	302	400	93.3	372			16.8
P. 218	218	8	7.65	9.75	7.20	7.45	39	54	54	7.10	2.20	4.15	4.45	11.47	199	18	446	434	99.5	416			17.1
P. 219	219	8.14	7.05	9.15	7.40	7.70	40	53	53	7.80	2.45	4.40	4.70	11.74	196	19	370	380	86.2	346			17.1

Copy of Page Taken from Our Corn Register Book. It Takes Some Book-keeping to Maintain the Pedigree of an Ear of Corn.

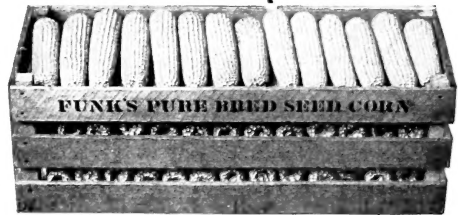
A Graphic Description of Our Methods



Valuable Strains that Have "Made Good" in Breeding Blocks

Are propagated in the Multiplying Plots, for increasing the amount of seed for use in the general fields. These plots range from two to fifteen acres in size, each plot representing a single family of corn that

has annually proven its utility through the rigid tests of the Breeding Blocks. But these strains or families must again prove their merit in Multiplying fields where several plots are in competition, before they are selected as seed for the general fields from which our supply of seed corn is gathered.



General Fields of Pedigree Corn

In this way, and only in this way, is it possible to attain the best results in breeding corn; to individualize the strain and propagate it throughout its existence as seed, with a traceable pedigree without mixture after their qualities are proven in the Breeding Block.



Harvest—Test Plot—Showing Production of Each Individual Ear.

conditions. From these same best rows, seed is also saved for larger fields of from five to ten acres, which we call multiplying plots, the yields of which are carefully noted.

Making the Performance Record

The yields, first of the mother plants, then of the multiplying plot and then the larger fields become the performance record of the strain of corn, the same as the individual track record of his progeny becomes the record of the trotting horse.

The results for the first few generations, while we may have large yield composed of all sorts and sizes of ears—hybrids from many hundreds of other plants—we find comparatively few ears equalling or excelling the mother ear. But these are the ears selected for future propagation and improvement and after the type is once fixed, we may expect a reasonable uniformity in the progeny of succeeding generations. Corn breeding is not necessarily the getting of typical beauty of ears, or perhaps a few ears and the rest nubbins, but it is to produce corn that will increase an average yield of 28 or 29 bushels per acre to an amount that will justify the labor and expense and that farmers have a right to hope for.



Placing Bag Over Tassel in Order to Secure Pollen to be Used to Fertilize the Silk of Another Selected Stalk. The Silk is Also Covered With Bag.

Yield Per Acre is the Unit

The all-essential point in which the farmer is most interested. The score card, the corn shows and the competitive corn judging are all good and have their place in awakening the interest to better and more profitable corn raising but the commercial corn breeder should not allow himself to become too greatly absorbed in ideal ears, unless these can show for themselves by authenticated records prepotent powers of reproduction. Dr. H. J. Webber, of Cornell University, advises in plant breeding to stick closely to the important characteristics and not to give weight to features not of practical value. Apparent but slight deformities will eventually take care of themselves, or may be improved. Personal experience has abundantly proven this to us, for some of our highest yielding strains of corn today are anything but ideal ears from the standpoint of the score card.

Theoretically a mother ear should be cylindrical, with well filled tip and butt, wedge-shaped kernels close together at both crown and next to the cob. The kernels should be of as nearly uniform size as possible in order that the planter may drop a given number of grains in each hill, thus securing an even and perfect stand of corn. But in front of all this, there must be a performance record. In other words, a pedigree of what the ancestors of this strain of corn

have been capable of doing. Seed coming from ordinary looking ears but possessing such strains of inherent power as to produce a medium size ear on a maximum number of stalks, is certainly far superior for the farmer to plant than the finest show corn that was ever at a corn show which has been selected merely from the point of beauty and the ideal score card. This is not saying that nothing can be accomplished by physical selection alone, and the planting of seed from good, symmetrical ears. A great deal can be accomplished both in improvement of type and to certain extent in yield.

Now comes the most interesting point. While we have maintained this selection for type and uniformity, in our breeding plots for highest yields, an



Fertilizing the Silk by Hand Pollinating. By this Method we Control both Male and Female Parents.

entirely different type of the same variety of corn has gradually become prominent. Here the selection is largely governed by the predominating type of the seed corn gathered from the highest yielding rows and by comparison with the type of the mother ear. After a selection of ten years from some of our highest yielding strains of Funk's Gold Standard Leaming and Funk's Yellow Dent, it is most striking to observe, that both varieties show a tendency toward the same type and neither of them conform to the present score card or our arbitrary selection of type for a perfect ear. In general the increase has been about fifteen bushels to the acre. Several thousand farmers, who have planted this seed in practically all of the corn growing sections of the world, agree that the increase in yield over the ordinary selection by the average farmer is from five to twenty bushels and in many cases more per acre. This compares favorably with our check plots. A series of experiments showed that six years out of

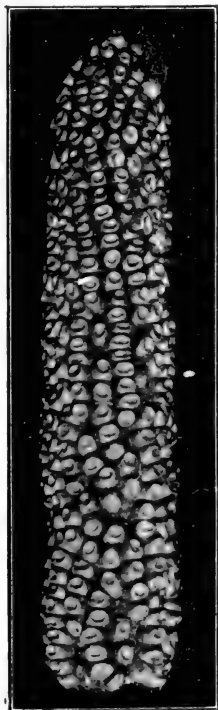


An Isolated Breeding Block on the Funk Farms.

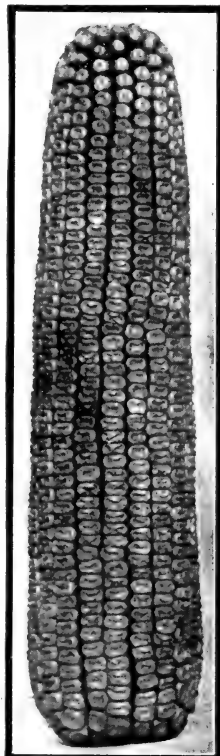
seven the smooth type of corn made the highest yield, and in another case this was true five out of seven times.

I wish it were otherwise and that we could discover some relation of idealism to high yield. I anticipate the question that if like produces like why should we not be able to reproduce a lot of fancy and high scoring ears? We may produce them, but we have to use a somewhat

different method, and in so doing we have so far been unable to obtain the largest yield. A great many farmers are making a mistake in demanding too large an ear for a seed ear. This throws the corn too late in maturing; even during an ordinary fall a large proportion of the stalks with large ears are caught by the frost; large ears are not really necessary for a bumper crop of corn. I have a report of an average of 106.8 bushels per acre of corn grown in Minnesota, with Minnesota No. 13 seed. And with what we would consider a nubbin in Illinois, Jerry Moore of South Carolina grew 228 bushels on an acre; none of the ears that he planted measured over $8\frac{1}{2}$ to 9 inches in length. Corn breeders should strive for a medium sized ear on a maximum number of stalks and then they can grow all the corn that fertility in the soil will allow.



A Hand Pollinated Ear. Every Kernel of Known Pedigree.



Nature does it Much Better, but Keeps no Record.

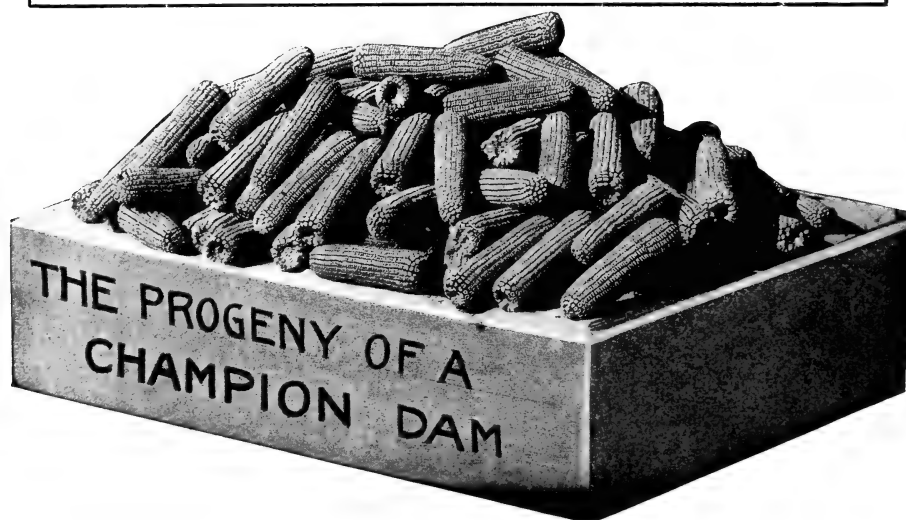


TO INCREASE THE YIELD PER ACRE

Select from the highest yielding strains from the highest yielding varieties.
Select seed corn from the stalk, not from the wagon box or crib.

Adopt a system of drying that insures a high germination and vigorous
growth on well prepared soil.

Butt, tip and screen the corn to provide uniformity which means a more
perfect stand and maximum yield.





A CORNER IN THE BIG WAREHOUSE AT BLOOMINGTON

A Visit to the Funk Bros. Farms

The Agronomy class of the Purdue University, Lafayette, Ind., under Prof. Wianco, was our guest on May 9, 1912, and after their return one of the members of the party wrote an article for the college paper, "The Purdue Agriculturist," which we take the privilege of reprinting

THE CLASS left Purdue at 6 a. m. May 9, for Bloomington, Illinois, where the day was spent visiting the Funk Bros.' farms. The weather was ideal and nothing was lacking for an ideal inspection trip. The party first visited the Funk Bros.' seed house, which contains all the drying rooms, grading apparatus, germinators and store rooms that go to make up a first class seed establishment.

One of the most interesting things that the building contains is a number of samples of corn in cases behind glass, arranged about the first room that was visited. These samples are representative ten ear samples of corn used in breeding work since 1901. Each generation is represented in order. Mr. E. D. Funk, the general manager, in explaining the work, was glad to point out a marked improvement in the 1911 sample over the 1901 sample. He also explained that the corn exhibited in the cases was not the best ten ears that could be picked from a given generation, but an average or representative sample that was useful in making comparisons. The improvement has been due entirely to careful, intelligent selection and breeding by men who have made a specialty of corn growing and understand the business thoroughly.

After a survey of the progress of the corn improvement work we were shown where the corn is brought in from the fields when ripe. The first selection of seed corn is made in the field from the standing stalks, selecting those ears that are most desirable. Attention is given to the size of the ear, its position on the stalk, stage of ma-

turity, and the number of stalks in a hill. A very careful selection is made at this time, but some undersirable ears are broken off and find their way into the lot, so that another selection is made at the seed house as the corn passes before experts on a broad endless apron on its way to the drying kiln.

As the corn comes in early in the fall it still contains 25 to 35 per cent moisture. It is necessary to reduce this moisture at once so the corn is put in crates and several thousand bushels at a time are put in a large kiln, where warm air at a temperature of 100° to 140° F. is kept circulating by means of large fans and left there for several hours. This reduces the moisture content to 10 or 15 per cent, after which it is ready for further inspection.

The corn that is to be sold on the cob is selected with great care, and after a germination test is made of every ear it is crated ready for shipment. The shelled corn that is sold for seed is selected just as carefully and is germinated in the same way. It, however, passes from hoppers down to men who with mechanical "butters" and "tippers" remove the irregularly formed kernels at the butts and the tips so that the corn may drop uniformly from the planter. This is further enhanced by grading the corn according to size of kernels in a grader so that a uniform drop may be assured by using the shelled corn. Mr. Funk explained that new customers usually bought the corn on the cob, but old customers always took the shelled corn. The company has built up a reputation by straightforward, honest

dealing so that they have the confidence of large numbers of customers in all parts of the country.

The past season being an extremely bad one for the selection of seed corn has caused an exceptional demand on the seed houses throughout the country this spring for seed corn. Mr. Funk showed a roll of figures from the adding machine nearly two yards in length that represented sums of money that had been sent in by farmers throughout the country for corn, but which had to be returned because the firm did not have the corn with which to fill the orders.

The testing of the corn for germinability is carried on during the win-

the room. During a bad year, such as the past year has been, no corn is shipped out for seed that has not been tested and which does not germinate around 95 per cent or better.

From the seed house the entire class of seventeen students and two faculty men were taken in automobiles to the Bloomington Club for lunch. After lunch several interesting and startling facts were learned about the great Funk farms which we were to visit during the afternoon.

The land constituting these farms was originally one immense farm, owned by Isaac Funk, who in 1824 bought 25,000 broad acres of that black silt loam soil of Illinois, which has



The Corn Passes Before Experts on a Broad Endless Apron on its Way to the Dry Kiln

ter and spring. The germinators are quite large and of sufficient capacity to handle hundreds of bushels of corn at a time. One of the germinators that is used during the warmer spring months is a long strip of sawdust, which acts as an absorbent for moisture, covered with a canvas which is marked off in two inch squares. The corn is placed in these and the records are kept from numbers along the edge of the germinator. Another germinator which is used during the winter months is essentially the same except that sand which is covered with a light sprinkling of lime is used as an absorbent. The lime acts as a fungicide. This room is maintained at a temperature of 85° to 90° F. by steam pipes which pass around the walls of

since remained intact in possession of the heirs. The land at present is owned by a dozen or more descendants who constitute the third generation and who manage the entire estate, each his particular share, co-operating as a firm or corporation. That they have been successful goes without saying. The Funk Bros. are business men and they conduct their large farms on a business basis. They are not growing corn, oats, hogs, poultry, and dairy cows for pleasure, but for profit. Their methods are extremely shrewd and practical. One of the valuable features of the trip was the opportunity to come in contact with practical men of this type.

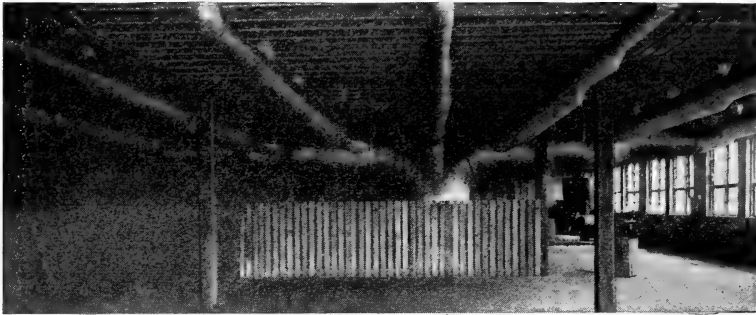
After lunch the party was taken in automobiles out over the farms which lie just a short drive out of Bloomington.

ton. On the way we learned that the fertility and productiveness of the land was maintained largely by the use of stable manure shipped in from Chicago at the rate of about four cars of 40 tons each per day from May 1st to October 1st. This is applied at the rate of eight tons per acre. Clover is also a means of maintaining the fertility of the soil and occurs in a three year rotation with corn and oats.

At the home of Dwight Funk, the agronomist, we had a thorough discussion of the methods of selecting and breeding corn. Mr. Dwight Funk is one of the few men who can carry on a line of work that is largely scientific, and who can at the same time

duce in the breeding plot. Performance is his test of merit.

At the next farm (Mr. LaFayette Funk's) visited, a scheme for handling corn economically at the cribs was investigated. These cribs were large and were filled by elevating shafts driven by horse power. From here we traveled in the automobiles across a virgin blue grass field of some 200 acres to the next farm. Hogs were a specialty there and were being cared for by C. C. Porter, '10, of Purdue. On this farm also a concrete silo was inspected that contained steam cooked silage. Mr. Eugene Funk showed us a sample of the silage and explained how it was prepared.



Large Conveyors Through Which Warm, Dry Air is Forced Into the Dry Kilns by a 13-foot Fan

discuss well the facts and principles underlying that work. He kept his corn for the breeding plots in cylindrical cans that were nearly air tight. The ears in these cans he explained had been selected in the breeding plots from corn of known parentage. The selections were made from hills containing three stalks, where there had been competition, and where the most vigorous and prolific yields might occur. Many factors are considered in the selection of corn for these breeding plots, and many devices are used. Throughout it all, however, Mr. Funk said that his aim was increased yield. For his purpose he cared not so much to know how high a percentage an ear of corn will score, but rather how much it will pro-

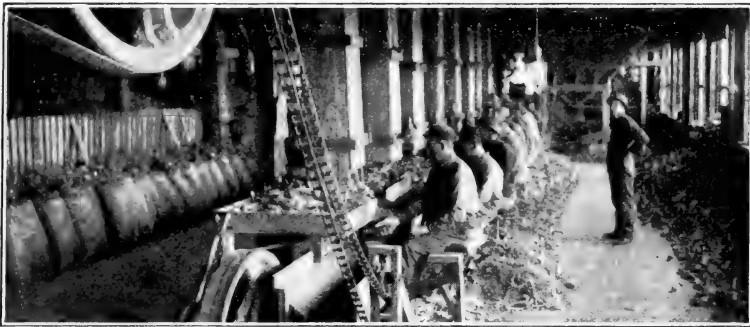
duce in the breeding plot. Performance is his test of merit. Steam cooked silage is a subject about which very little is known. The silo on this farm is of the ordinary cement construction. It is covered and has doors of the ordinary type for the removal of the silage. The silage is put in the silo in the usual way, but after a day's filling, steam is admitted into pipes that were previously laid near the bottom in an octagonal form some distance out from the wall. These pipes are perforated and the live steam passes through the silage for an entire night. The next day's filling is treated in the same way and when the silo is full the entire mass is heated for some time. The silage is a little darker than the ordinary kind, but Mr. Funk says it will

not spoil as readily, and that horses eat it with a great relish.

While spinning over to the next farm we learned a little about the tenant system on the entire estate. Some tenants are cash renters and some work for half. During the busy season about 250 men are employed on the whole estate, while during the winter less than half that many are retained. One remarkable thing about the farms was the well kept attractive tenant houses. All were comfortable and home-like, and the yard and surrounding premises showed that the tenants took a pride in keeping the place neat. The "Benjamin F. Funk" school house was another remarkable building that was passed while

be scared by any one talking in the poultry house and so that the eggs can be gathered with the least effort. The brooders and heating arrangements are automatic so that considerable care is eliminated. The farm has furnished eggs all winter at 50 cents per dozen in the crate to the Blackstone hotel at Chicago.

The next farm was a dairy farm, Mr. C. A. Funk's, with 42 head of Guernsey cows that were well housed in a large dairy barn. The University of Illinois was co-operating with the dairy in the matter of milk tests and feed recommendations. A test is made once each month. The cows were receiving a ration consisting of a grain



Carefully Butting and Tipping and Inspecting Each Ear
Before Passing to the Sheller

going to the farm of Lyle Funk. The school building has been recently constructed for the tenants' children on the estate. It is centrally located as a country school building of unique appearance and considerable architectural beauty. It has broad projecting eaves, with a well-lighted, sanitary appearance.

At the farm of Lyle Funk we saw a practical, up-to-date poultry plant. Mr. Funk has between 900 and 1,000 White Leghorn hens. He has twelve incubators that require 4,300 eggs to fill, and need the attention of an expert to handle. His plant has many original devices that show that there is a continual effort at improvement. The nests are so arranged that the hens will not

mixture of gluten and cob meal in the proportion of 45 pounds of the former to 255 pounds of the latter, with about 48 pounds of corn silage along with some clover hay. The milk from the dairy is sold at wholesale in Bloomington.

The next farm, Mr. D. N. Funk's, was also a dairy farm with Guernseys managed in much the same way. One feature of this farm was a 70-foot round barn with a silo in the center. This farm was the last one visited and the party was taken back to Bloomington after having had a most enjoyable automobile ride of nearly fifty miles, and having learned much about practical farming methods.



A FIELD OF FUNK'S 90 DAY CORN ON THE KELLOGG FARM, Three Rivers, Mich.

“COMPARE this field of *Pedigree* corn with the field of *common* corn on the opposite page. Both fields were planted on the same day and were photographed on the same day. The soil of these two fields is identical; they are separated only by a wire fence. We paid \$5.00 per bushel for the *Pedigree* seed used in planting this field—cost per acre for seed 60 cents. The corn at the time the photograph was made—August 5—stood nine feet high. The entire 25 acres was a perfect stand and was even in growth. The field averaged two large ears to every hill. As this book goes to press the field gives promise of an average of 100 bushels of perfectly developed ears to the acre. Judging from the corn grown in this section of the state we have more than doubled the yield of the average field of the common corn. We are not in the business of selling seed corn. These photographs and comparisons are used to illustrate the importance of using *Pedigree* seed and plants in order to insure the greatest percentage of profit per acre. Our years of experience in agriculture have taught us that it is not a question of how much may be saved by using cheap seeds and plants, but rather how much may be produced per acre by using seeds and plants of the highest productive power. No man who grows crops can afford to do other than make his acres yield their best.”

FUNK'S 90 DAY SEED CORN

NEW YORK, N.Y., April 15, 1912.

In previous years I have tried some of this variety at Greenwich, Conn., with very satisfactory results and my father is now anxious to try the experiment at Bay Pond, which is in the Adirondacks and where the growing season is short.

HANCOCK, WIS., Jan. 9, 1912.

I am very much pleased with the seed corn purchased of you last Spring. Can say that it yields one-third more fodder to the acre than the common corn we raise. Shall want some more seed in the spring.

THESE TWO PHOTOS WERE TAKEN ON THE STRAWBERRY BREEDING FARM OF R. M. KELLOGG, AND ARE REPRODUCED BY PERMISSION FROM PAGES 4 AND 5 OF THEIR 1913 CATALOGUE. *It treats of Great Crops of Strawberries and How to Grow Them.*

Write to R. M. KELLOGG CO., Three Rivers, Mich.



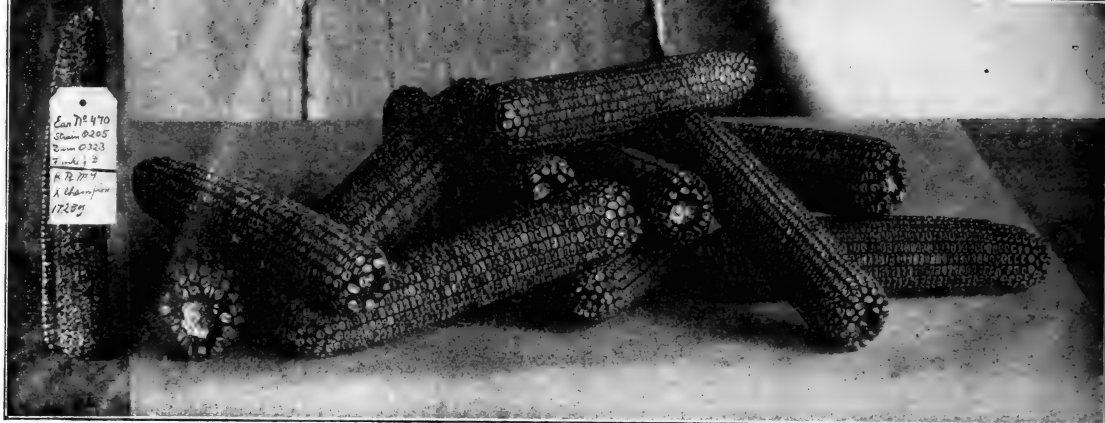
A FIELD OF COMMON CORN ON AN ADJOINING FARM

“THE photographers camera may always be relied upon to picture things as they are. A glance at this field is all that is necessary to reveal the difference between Pedigree seed and common seed. Note the undeveloped stalks here as compared with those on the opposite page. Note also the uneven growth of the stalks, which is a sure mark of the varying vitality of the seed. This field indicated a yield, when the photograph was made, of about twenty-five or thirty bushels of nubbins per acre. The seed cost \$1.00 per bushel, or 12 cents per acre. The saving on seed for this field over the cost of Pedigree seed was 48 cents per acre. The cost of plowing and preparing the land, planting the seed and cultivation, was the same as in the case of the Pedigree corn. Figuring the corn at 50 cents per bushel out of the field, the Pedigree corn yielded \$50.00 per acre, while the common corn yielded only \$15.00 per acre, assuming that the selling price for the Pedigree corn and the common corn was the same. On this basis we have a difference of \$35.00 an acre in favor of Pedigree corn, with only the difference in the cost of seed of 48 cents per acre. But we should not so calculate the selling price of perfectly developed ears, because our neighboring corn growers were glad to buy our corn at \$2.50 per bushel for seed. Which is the better investment—to save 48 cents per acre in the cost of seed, or to make such a gain as we have done in this instance? Every successful farmer knows that our way wins success.”

FUNK'S 90 DAY SEED CORN

VERSAILLES, ILL., Dec. 15, 1912.

Last Spring I ordered two bushels of Funk's 90 Day Seed Corn, which planted about 14 acres. I think every grain grew as there was scarcely a hill missing. We planted Reid's Early Dent in the same field on the same date, which yielded about the same, but of inferior quality, there being about fifty per cent difference between the two varieties in quality, owing to the fact that Funk's 90 Day Corn matured earlier and escaped the frost. I am satisfied with my investment in the seed.



Ear No. 470
Strain 0205
Ears 0323
Tender 2
No. 707
A. H. H. H.
17889

Mother Ear No. 0470 and Progeny

Funks Yellow Dent

Without a Rival as an All-Purpose Corn

THIS corn is bred from Reid's Yellow Dent and is a light golden color, very characteristic of this variety. The ears are 8 to 11 inches long, 7 to 8 inches in circumference, 18 to 24 rows of kernels, each row containing 50 to 60 kernels. The ears are cylindrical from butt to tip. The cob carries a large amount of corn, shelling 88 per cent grains, and often better. The butts and tips are particularly well filled. The ears of this variety are remarkably uniform. In this respect it is remarkably superior to all other corn. The kernels are medium in thickness, blunt wedge shape, setting very closely together, no lost space between the rows. A wagon load of this corn weighs more than a wagon load of any other variety, proving its solidity. The cob is red, medium to small, small shank, and easy to shuck.

This variety is a vigorous grower, with stalks 8 to 12 feet high, heavy below the ear, moderate above and does not blow down easily. It has an abundance of foliage. This makes it an excellent fodder and ensilage plant, producing a heavy tonnage to the acre. When cut and put in the shock it cures completely, retaining its natural color, becoming the very best of fodder.

By careful selection, elimination of barren stalks, this corn has been so improved that a yield of 90 to 100 bushels an acre can be grown on good soil carefully managed.

Funks Yellow Dent Is Incomparable

Its Solidity, Uniformity, Development of Tip and Butt and Extraordinary Yield, together with its Great Feeding Value, place it without a rival as an all purpose corn. Unapproachable as a yielder, it withstands the harshest weather, and when shelled more of this corn grades No. 2 on the Chicago market than any other variety. This alone sometimes means from two to ten cents per bushel premium over ordinary corn.

This corn grows best on the rich corn soils of the Corn Belt States. It is here that it attains its perfection, producing the largest yield of the highest quality. It is medium early in maturity and can safely be planted as far north as southern Wisconsin. **For prices see page 27**

Funks Yellow Dent—Ear and Shelled

Cornland, Ill., Dec. 12, 1912.

I have tried several different seed firms, but I find by careful test and observation there is none that have given as good satisfaction as yours.

San Jose, Ill., Dec. 13, 1912.

I have been a strong advocate of your seed corn; I have influenced a great many farmers to give it a test and I have failed to hear one that was not well pleased. We have a sandy loam, also black heavy soil on what was Masoon Co. swamp land at one time. One man that I worked hard on to try your seed corn finally bought one bushel; he said if he had bought enough to have planted his two hundred acres, it would have made him over \$700.00. His neighbors told him that he was crazy to pay \$5.00 for seed corn. I never have known as many farmers to put up seed corn as they have this Fall.

Delphi, Ind., Dec. 12, 1912.

I have planted 27 acres with your Funk's Yellow Dent and notwithstanding late Spring and dry Summer here, we harvested around 70 bushels of good sound corn.

Elwood, Ind., Dec. 12, 1912.

I am well pleased with corn and results from your high yield corn; think the yield was 10 to 15 bushels more than I usually raised.

Lewisville, Ind., Dec. 11, 1912.

I have been satisfied with the seed that you sent me; it has been a paying investment for me; it yielded 80 bushels to the acre.

Williamsport, Ind., Dec. 30, 1912.

I like your corn very much; it is the solidest and best corn in the neighborhood; it yielded 90 bushels to the acre; it was a paying investment for me.

Wilton, Iowa, R. R. No. 3, Dec. 12, 1912.

I was satisfied with the seed that you sent me; it was a paying investment for me and yielded about 90 bushels to the acre.

Marengo, Iowa, Dec. 14, 1912.

I never raised over 50 bushels per acre till I got your seed. If I had got seed corn enough to plant all my ground, I would have been money ahead.

Kellogg, Iowa, Dec. 25, 1912.

I have been satisfied with the seed that you sent me; it has been a paying investment; it yielded 60 bushels to the acre.

Clarksville, Mo., Dec. 10, 1912.

Received your letter; will say the seed I got of you last year was good as anyone could wish for. I planted it on not the best of land, but fair land, and got a perfect stand. I think it would be safe to say I did not have 20 missing hills and will make anyhow 70 bushels to the acre. Have not shucked all of it yet, as it is in the shock, been too dry to husk.

West Norwood, N. J., Dec. 19, 1912.

Am pleased to say that the seed corn I purchased from you last Spring turned out very well. We planted about three acres—one acre being sod ground of sandy soil, which turned out 95 bushels per acre and two acres being of loose sandy soil, which turned out at the rate of 85 bushels per acre. In both cases, the yield would have been much heavier had the season not been so dry.

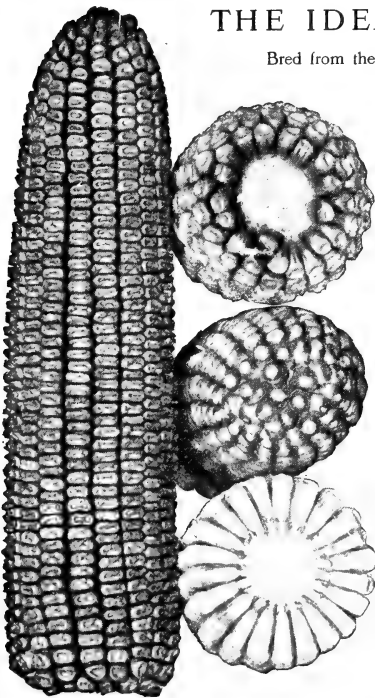


A Leaming Breeding Block, Note Every Other Row Detasseled

Gold Standard Leaming

THE IDEAL FEEDERS' CORN

Bred from the ORIGINAL J. S. LEAMING CORN



THE LEAMING CORN was first originated in Ohio in 1826, by Mr. J. S. Leaming. This corn was brought to Illinois by the late Hon. E. E. Chester of Champaign County, Illinois, over fifty years ago, and since then many strains and varieties have been started from this oldest of known varieties of Dent Corn.

Funks Gold Standard Leaming is a corn that is known as **The Feeder's Friend**. For cattle, hogs and sheep there is none better. Rich in both protein and oil, it becomes the ideal from a feeder's standpoint. The cob is more readily crushed and masticated by cattle than most varieties.

For dairy districts, for ensilage purposes, **Funks Gold Standard Leaming** is unsurpassed. Possessed of an abundance of foliage, with broad fine quality of leaves and heavy stalk, 20 to 25 tons of ensilage per acre is an average yield.

Large ears on heavy stalks produce many bushels to the acre and while this corn is recognized by all as the great silage and feeding corn, it is also a big yielder under our modern methods of selection and breeding. It is of a rich yellow color and requires 110 to 120 days to fully mature. **For Prices see Page 2**

Gold Standard Leaming

Sidney, Ohio, Dec. 9, 1911.

I am more than pleased with the corn I purchased of you this Spring. Good judges estimate the yield at 85 bushels per acre. The crop matured and most of it will make seed corn. It is much better than any of my neighbors for miles around. I paid \$20 for 4 bushels which was far the best money I paid out this year.

Battle Creek, Mich., Nov. 8, 1912.

The writer desires to thank you for the good time you gave him while visiting you last week. He enjoyed it very much and was very glad to see how much care you were giving your seed corn. But few farmers save their own corn with the care you give yours, to say nothing about the quality of the corn to begin with.

Owaneco, Ill., Dec. 27, 1912.

The seed corn I bought from you was a paying investment even at five dollars a bushel. I would have been ahead if I had given ten for another bushel instead of corn I planted. I got three bushels from you.

Beecher City, Ill., Dec. 13, 1912.

The seed corn purchased from you last Spring was satisfactory and the yield was at least 10 bushels more to the acre than seed by the side of field planted with seed that was tested.

Griggsville, Ill., Dec. 12, 1912.

I ordered 2 bushels seed corn last Spring; the corn was all I could ask, it was nice and dry of good quality, full weight, every ear good.

Hospital, Ill., Dec. 12, 1912.

Yes, I have been satisfied with the seeds that you have sent me; it has been a paying investment for me; it yielded 74 bushels to the acre.

Galesburg, Ill., Dec. 9, 1911.

The seed corn I bought from you last Spring all grew and gave a yield of about 95 bushels per acre wagon box measure.

Jefferson, Iowa, Dec. 12, 1912.

I am satisfied with the seed that you sent me; it was a paying investment and yielded about 70 bushels per acre.

El Paso, Ill., Dec. 20, 1912.

The corn from your seed made 76 bushels—a good yield. The Rape and Alfalfa Seed were very satisfactory.

Beardstown, Ill. R. R. No. 2, Dec. 18, 1912.

Was satisfied with the seed from you; it was a paying investment and yielded about 70 bushels to the acre.

Wellman, Iowa, Dec. 10, 1912.

I was satisfied with the seed that you sent me; it was a paying investment. It yielded 65 bushels to the acre.

Henry, Ill., R. R. No. 2, Dec. 18, 1912.

I was satisfied with the seed sent from you; it was a paying investment and yielded 75 bushels to the acre.

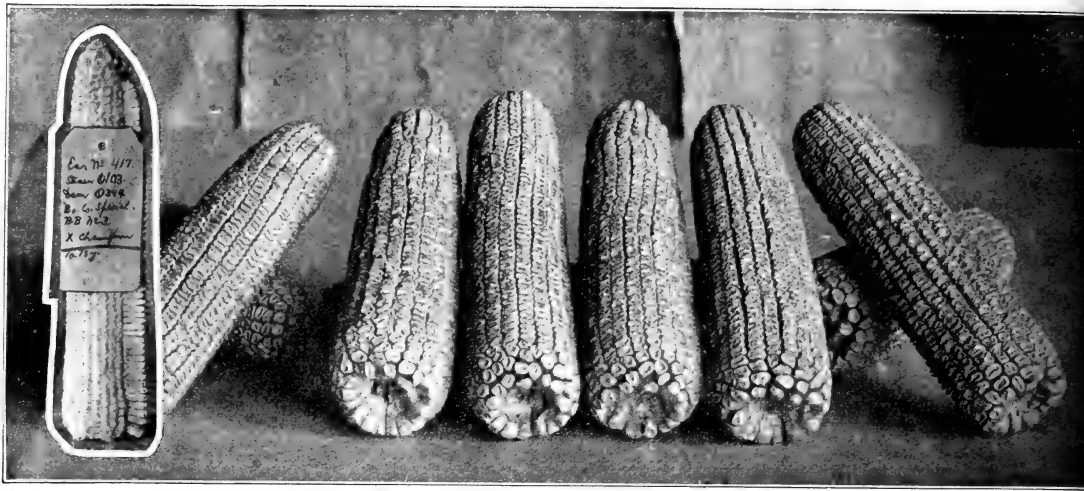
Farmer City, Ill., Dec. 2, 1912.

My corn I got of you last Spring grew fine on pasture land making 85 bushels per acre at 75 pounds.

Ivesdale, Ill., Dec. 23, 1912.

180 ac s made me 13,000 bushels of corn from 24 bushels of seed.

in the ear.



Mother Ear No. 0417 and Progeny

Boone County Special

BRED from the Boone County White, retaining all the valuable characteristics of the parent with increased yield, size of ear, depth of kernel and chemical content. A highly bred white corn of extra large size, containing a high percentage of oil. It is a medium late maturing variety. The ears are from 8 to 11 inches long, $7\frac{1}{2}$ to $8\frac{1}{2}$ inches in circumference, containing from 18 to 24 rows, weighing from 12 to 18 ounces. The cob is medium to large and pure white in color. The ear shank is medium in size. The ears resemble a cylinder, rounding off within an inch of the tip. **Why is a cylindrical ear superior to a tapering ear? A tapering ear means the dropping of several rows where the taper begins. This is a loss of just that much grain.** The butts and tips of Boone County Special are exceptionally well filled. The ears are of uniform appearance, shape and size. The kernels are pearly white, moderately rough, very deep, with fine, large germ. The great depth of kernel always insures a large percentage of shelled corn. The conformation of stalk is very effective in withstanding the destructive effect of high winds, being exceedingly large and stiff from the ear to the ground. The rooting system is extensive, affording great facilities for gathering plant food. The foliage is abundant, leaves broad, thick and succulent, curing into large quantities of peerless fodder.



Each Row from a Mother Ear.

By long and careful breeding the number of unproductive and weak stalks has been reduced to the minimum and the average size of the ears increased to the maximum. As a result of this painstaking, scientific work,

Boone County Special is the Greatest Yielding Corn Known

For Prices See Page 27

Boone County Special

Bement, Ill., Dec. 17, 1912.

I got a fine stand, but did not have seed enough to plant my entire crop; finished planting your seed in the middle of an eighty acres planting it the long way; finished it with a right good kind of white corn we have raised a number of years. The huskers could tell the row that we commenced planting our own seed; they got just about 10 bushels to the acre less corn; it was easy to see the difference as we weighed every load. We are \$600.00 better off by getting your seed in getting an increased yield. The difference was very marked all in the same field, planted the same day, tended the same and only the width of a corn row between the two kinds of corn. I think you are doing a good work.

Greenville, Ill., Dec. 11, 1912.

The seed purchased from you this year did exceptionally well. I secured a splendid stand and on 14 acres of tiled bottom land the yield made about 80 bushels per acre and on the balance of the land in corn, being about 30 acres, partially upland and old cultivated fields, the yield was about 55 bushels per acre, all being good sound corn. At the time I thought \$5.00 for seed corn was pretty high, but from the above, you will see that the investment to me was a good one.

Atlas, Ill. Dec. 28, 1912.

Will say that I have been pleased with your seed and have always considered it a good investment, not only in quantity, but in quality. The average yield is about 70 bushels, some years better, but the best advantage I see in your seeds is quality.

Barry, Ill., Dec. 11, 1912.

I have been fully satisfied with the seed that I have received from you especially in the growing per cent; it looked as if every grain grew. I always feel safe in recommending Funk Bros. Seed Co.

Cerro Gordo, Ill., Dec. 23, 1912.

In regard to the seed I purchased of you, I will say that I would be far ahead, if I would have purchased all my seed of you, as I got an average of 2½ stalks per hill.

Blandinsville, Ill., Dec. 11, 1912.

I have been satisfied with the seed that I have got from you; it has been a paying investment and yielded 70 bushels to the acre.

Dwight, Ill., Dec. 12, 1912.

I purchased a bushel of your corn last Spring and it was fine. I had mine hung up and it was nice and dry, but it did not grow as good as yours did.

Gloucester, Va., Dec. 1, 1911.

Your corn has given me the best of results. In regard to using your seed corn will say that it paid me well.

Illiopolis, Ill., Dec. 10, 1912.

The seed I bought of you grew 20 per cent better than seed of my own; planted in the same field and on the same day.

Fieldon, Ill., Dec. 12, 1912.

I planted one bushel Boone County Special ear and was well pleased with it. It made an average of 78 bushels per acre.

Williamsville, Ill., Dec. 20, 1912.

The stand from your seed was almost perfect, showing a strong germ. It grew strong and vigorous.

Carlinville, Ill., Dec. 6, 1911.

I have been much pleased with the seed I got from you.



C. T. Rossiter, Claremont, New Hampshire, harvesting Funks 90 Day Corn.
Note below what Mr. Rossiter says.

Funks 90 Day THE EARLIEST HIGH YIELDING CORN

SINCE 1892 we have been breeding this corn earlier each year. **Funks "90 Day"** corn is an early yellow dent variety with large yielding qualities. The ears are generally about seven inches long and weighing seven to nine ounces. We have an early maturing corn with high yielding ability. For the early feeder, or the man who has to replant or cannot plant until late, this corn is invaluable. Under ordinary conditions this corn can be fed from the first to the middle of August. We believe this to be the only corn that can be fed as early and at the same time give a big yield per acre.

For an early feeding corn **Funks 90 Day** has no equal. The northern farmer has in this corn an ideal silage, maturing before frost and making a large yield. For the Eastern farmer the same may be said, adding that this makes a fine feeding corn. In the South this corn has taken the place of the well known June corn making a greater yield and being a fine drouth resister.

We recommend this corn to all. It is one thing the average farmer requires—early maturing corn. This is it and we urge you to try some this year. It might come in very handy if you have to replant or cannot get into your field until late. **For prices see page 27.**



















Claremont, N. H., Jan. 6, 1912.

We were well pleased with your 90 Day Seed Corn. Had such a large growth that it was hard to get it through the harvester when cutting. The size of stalk and abundance of leaves makes it an ideal ensilage corn. Best of all every kernel came so we figure it takes about one-half the usual amount to the acre.

Yours truly, C. T. ROSSITER.

Just a Minute, Look This Over

What will be the yield per acre if each hill bears a medium sized ear (12 oz.) on every stalk? Below is a copy of a chart prepared by the Illinois College of Agriculture and exhibited at the National Corn Exposition at Omaha, 1909.

CORN PLANT'D	STALKS Per HILL	STALKS Per ACRE	IF EACH HILL BEARS	The Yield Will be	Worth Market Price at 50 cents
3½x3½ Ft.	1	3556	One 2 oz. ear 	6¼ bu.	\$3.12
"	1	3556	One 4 oz. ear 	12½ bu.	6.25
"	1	3556	One 6 oz. ear 	19 bu.	9.50
"	1	3556	One 8 oz. ear 	25¼ bu.	12.62
"	1	3556	One 10 oz. ear 	31¼ bu.	15.62
"	1	3556	One 12 oz. ear 	38 bu.	19.00
"	1	3556	One 14 oz. ear 	44¼ bu.	22.12
"	1	3556	One 16 oz. ear 	50¼ bu.	25.12
"	1	3556	One 18 oz. ear 	57 bu.	28.50
"	2	7112	One 12 oz. and one 8 oz. ear 	63¼ bu.	31.62
"	2	7112	One 16 oz. and one 6 oz. ear 	69¼ bu.	34.62
"	2	7112	One 14 oz. and one 10 oz. ear 	76¼ bu.	38.25
"	2	7112	Two 14 oz. ears 	89 bu.	44.50
"	2	7112	One 16 oz. and one 14 oz. ear 	95 bu.	47.50
"	3	10668	Two 14 oz. and one 6 oz. ear 	108 bu.	54.00
"	3	10668	Three 12 oz. ears 	114 bu.	57.00
DRILLED	1 STALK EVERY 14 INCHES	10667	One 12 oz. ear 	114½ bu.	57.25
DRILLED	1 STALK EVERY 16 INCHES	9324	One 14 oz. ear 	116 bu.	58.00

We have a record of a 100 acre field which produced 107 bushels to the acre. Another field of 220 acres from which was gathered an average of 101 bushels to the acre and 600 acres which averaged 80 bushels.

We plant our corn three feet six inches each way, two and three kernels to the hill. From the above chart one can readily see that we produced an "average size ear on a maximum number of stalks."

Funk Farm Facts

That Funk Bros. Seed Company are the ORIGINAL and the MOST EXTENSIVE Breeders of HIGHEST YIELDING seed corn in the world.

We BREED for INCREASED YIELD, and that is what you are looking for.

There is a vast DIFFERENCE in the work of BREEDING for increased yield over the usual method of growing of corn from the SELECTION of fine looking ears only.

It is the SCALES that give us OUR RECORDS of our HIGHEST YIELDING varieties and not the premiums won or the score card records.

It is an actual fact, demonstrated on our 8000 acres of corn fields every year and proven by hundreds of testimonials, that an average INCREASE YIELD OF FIFTEEN BUSHELS PER ACRE can be had by using seed corn from high yielding strains.

It only costs you seventy-one cents per acre to plant our high yielding seed corn and you have only to get an increase of two bushels per acre to be ahead.

If it were a practical thing to do, we would gladly furnish the seed and take our pay in part from the yield, knowing that we would get much more than the cost that we charge for the seed.

We are content to submit the proof of our work from the results obtained by thousands of customers who are scattered all over the grain growing sections of this entire world. READ FOR YOURSELF WHAT SOME OF THEM HAVE TO SAY.

We do not expect every customer out of so many to have maximum results or that all will be entirely satisfied. This would be out of all reason and impossible.

We are going to do the best we can and send you the best we are able to produce, and if you are not entirely satisfied with the seed we send you return them to us AT ONCE and we will gladly refund your money and pay return charges.

We make a careful test of the vitality of our seeds before they leave our warehouse. Each lot of seed carries a certain number and this number is recorded on our warehouse copy of our shipping record. We retain a sample of each lot of seed for three years besides the germination test. We can thus refer to a sample of the seeds sent out at any time from our warehouse.

We do not knowingly send out extra selections of ears of corn or other seeds for parties to make exhibits of our seeds in their own name in order to compete with others of our customers who have purchased seed from us and grown their own exhibit. Occasionally we receive an order of this sort and when we have suspicion to the above effect we reserve the right to refuse such an order.

We have been told that parties have sold seed under our name and unknown to us and we desire to notify our customers.

Parties who sell or attempt to sell seeds under our name and without our consent are hereby notified that they are subject to prosecution under the law.

Our highest yielding seed corn is packed and shipped only in our stamped boxes and bags and any seed corn offered as having come from Funk Bros. Seed Co. without having our regular stamp on box or bag is not grown by us.

By securing some of our highest yielding varieties each year you get the benefit of our experience right up to date.

After reading the above, and it is based on facts, can you hesitate to try one or more bushels of Funks High Yielding Seed Corn, even though you have some fine looking early picked corn from your own fields?

Prices for Seed Corn



All Ear Corn is Shipped in Our Wire Bound Boxes and Our Shelled Corn in Bags Bearing Our Stamp and Name

For our Highest Yielding, Extra Selected Seed Corn prices are the same for any of the following varieties:

Funks Yellow Dent	{ On the ear in boxes Or shelled in bags }	Per bushel	- - \$5.00
Gold Standard Leaming		One-half bushel	- 3.00
Funks 90 Day		One-quarter bushel	2.00
Boone County Special			

Bags and boxes for corn free.

EXPLANATION

We are asked many times—"What is the difference between your Ear Corn and Shelled Corn from your **Highest Yielding Varieties?**" The fact is there is no difference so far as the seed or yielding quality of the corn is concerned. **One will produce just as many bushels as the other.**

Both come from the same fields; selected with the same care; dried and stored in the same way; in fact, together they only represent from five to ten per cent of the crop. The remaining corn from the field is stored in cribs on the farm either for general market or to feed to our live stock.

The best looking ears are selected for the Ear Corn and packed in boxes specially made for our purpose.

The Shelled Corn is butted and tipped, each ear at a time, shelled and run over two number nineteen screens on power cleaner. All ears that do not come up to our standard are rejected and sold as market corn.

This method gives as thorough a uniformity for selected kernels as it is possible to secure. The Shelled Corn is ready for the edge drop or any planter when you receive it. In fact the purchaser receives more for his money by buying Shelled Corn at the same price, from our method of selection, than he does for the Ear Corn.

The Ear Corn is weighed in boxes at 70 pounds net to the box. The Shelled Corn is weighed at 56 pounds net in bags after butts, tips and irregular kernels have been removed.

Funks Great American Oats

CORN, oats, clover, followed by wheat or corn is the rotation followed on the Funk Farms. In 1903, 1904 and 1905, Mr. Norton, of the Department of Agriculture, was stationed by the U. S. Government on our seed farms for the purpose of studying and breeding oats and at that time we began with a series of test plots with over 200 varieties of oats gathered from all parts of the world. We continued these tests for a number of years, eliminating the low yielding and undesirable varieties, and this careful selection and testing resulted in the discovery of **Funks Great American Oats.**

Below is a table showing the marked difference between Funks Great American Oats and its nearest competitor, 14.2 bushels for seven consecutive years. At the present market value of oats this means more than the cash rent on the average grain farm. Does this appeal to you? Hundreds of farmers who have secured Funks Great American Seed Oats write us that as a rule they outyield anything they have ever tried. They are not a fancy oat any more than our highest yielding strains of corn are fancy ears, **but they yield,** and at the same time they sell with other white oats on the market for standard oats.

Varieties	RANK	RANK	RANK	RANK	RANK	RANK	7 YEAR
	1903	1904	1905	1906	1907	1908	AVERAGE
FUNKS GREAT AMERICAN	1	1	1	1	1	1	57.3
Silvermine	3	4	2	5	3	4	43.1
Big 4	10	3	4	2	5	5	42.
American Banner	12	7	12	3	11	2	41.1
Great Dakota	5	2	8	4	9	10	40.0
Musselshell	7	5	9	6	12	9	39.6
Quaker	2	12	13	7	4	13	38.3
Montana Late	4	9	10	9	2	12	37.5
Wessels Wonder	6	6	11	14	7	7	37.3
Tarter King	8	8	5	15	10	11	36.5
Red Rust Proof	11	14	6	8	13	3	35.9
Wisconsin No. 4	9	10	14	10	8	6	33.0
Clydesdale	13	13	15	11	15	14	31.0
Probestier	14	15	7	13	14	8	30.7

Funks Great American Oats are of medium early maturity, ripening about July 6th to 10th according to season. The straw is medium heavy and makes the finest winter feed for horses when baled and fed with a little alfalfa molasses meal. Thousands of horses are being fed in the cities this winter in this way while hay is so high priced. Save your oat straw, Brother Farmers, don't burn it, it is worth too much money to you if you only knew it.

Remember, no other seed firm is able to offer these oats for they have been on the market but a few years.

Sow Funks Great American Oats and you will harvest more oats to the acre than ever before. We urge you to send your orders early. Do it now. Our stock is limited.

Vicksburg, Pa., December 14, 1912.

As near as we can figure it out, the Great American Oats yielded between 50 and 60 bushels per acre, while our own oats yielded about 30, although this is not exact.

Colfax, Ill., December 12, 1912.

I sowed 10 bushels of Funks Great American Oats on four acres of ground, being measured along one side of a 22 acre field. They grew splendidly, but did not look any better than the rest of the field when ripe. I cut and shocked them by themselves; when I threshed them they made 81½ bushels per acre, machine measure, which is equal to 85 bushels by weight; the rest of the field made 65 bushels. To say that I am pleased is putting it mildly.

PRICES FOR FUNKS GREAT AMERICAN OATS

One to five bushels	- - - - -	\$1.25 per bushel
Six to sixty bushels	- - - - -	1.00 per bushel
Fifty-one to one hundred bushels	- - - - -	.90 per bushel
One hundred and one to five hundred bushels	- - - - -	.85 per bushel

B A G S F R E E



Visitors Inspecting Our Small Oats Plots.

Silver Mine Oats

Are perhaps the most generally sown and most widely known white oats in the Central West. In our test plots (*see other page*) they rank next to the top in yield and for years we considered them our leading oat. They produce a beautiful, white, plump berry. The straw is strong and stands up well. We have hundreds of customers who will not sow anything but **Silver Mine Oats**.

Letts, Ind., August 12, 1912.

I have bought considerable seed of you—corn, wheat and oats, and it has always been entirely up to my expectations.

Red Texas Oats

Known as our early rust proof oat and very popular among southern farmers, because it ripens before the extreme hot weather. It has also proven a heavy yielder on our own farms in Illinois and with a record of almost 80 bushels to the acre. Its strong characteristic is its ability to stool and being a short straw does not lodge. Those who have tried the **Red Texas Oats** in the north report that they are well pleased with the results. On rich land and for a rotation with clover it is a winner.

Manito, Ill., December 22, 1912.

Received 12 bushels of Red Texas Seed Oats. I was satisfied with it; it paid the investment; it yielded 80 bushels to the acre on four acres.

Funks 60 Day Oats

For similar reasons that we offer our Funks 90 Day Corn, it often happens that one wishes to sow one field of early oats—first, in order not to have all of the oats harvest ripening at the same time; and second, we have found this early oat a money maker by sowing over the thin places in a frozen or drowned out wheat field. You can harvest these oats at the same time you do your Fall wheat. The oats outyield the Early Champion or 4th of July oats and are not so susceptible to smut.

PRICES ON ANY OF THE FOREGOING OATS NOT OTHERWISE LISTED

One to five bushels	-	\$0.80 per bushel
Six to fifty bushels	-75 per bushel
Fifty-one to one hundred bushels	-60 per bushel

SPECIAL PRICES ON CARLOAD LOTS—BAGS FREE



Alfalfa

More than ever before attention is being given to the growing of Alfalfa in the states east of the Mississippi river. Over 3,000 farmers are growing Alfalfa in Illinois today. The habit of the plant is being more readily understood by the Corn Belt farmer, and under the right sort of treatment Alfalfa will flourish and become one of the most valuable hay crops.

Space does not permit us to go into details at this time about the growing of Alfalfa, but to any one who is particularly interested we will gladly send them a very complete little book on Alfalfa, published by the Illinois Farmers Institute, under title of Bulletin No. 18.

We make it a point to handle only the best grades of re-cleaned Alfalfa seed. The market price fluctuates the same as clover, so must ask that you write us for prices.

Clover Seed

Our Clover is of the best quality and

thoroughly re-cleaned. We handle all sorts of

Clover Seeds: Red Clover, Mammoth Clover, Sweet Clover, White Clover and Alsike. Market price fluctuates so that we can not quote a price that would continue throughout the year. So we must ask you to write us for prices on clover seed.

Some grades of clover seed can be purchased cheaper than ours, but the cheapest is often the dearest. We find that it always pays to buy the best seed.



Timothy

We re-clean all our seeds on the latest improved machinery and our supply of Timothy seed is excellent.

The Timothy seed crop of the past season was good and our prices are reasonable.

Prices quoted on application.



Dwarf Essex Rape

EVERY farmer who has hogs, sheep and young stock should plan to grow a patch of Rape. If you have an old feed lot that you wish to have something green on during the summer besides weeds, sow three or four pounds of Rape seed to the acre on it and you will have a hog and sheep pasture all summer.

We often sow three pounds of Rape in our oat fields at oat seeding time. After the oats are cut the Rape grows rapidly and makes excellent pasture until heavy frost.

PRICES—6 cents per pound.

Soy Beans One of the nitrogenous crops that is possessed of real merit. Combines both the fertilizing qualities of clover and yield of forage with a seed crop that has a higher nutritive value than oats. It should have its place in the rotation system of the farm. Sown with Rape in the corn before the last cultivation it furnishes great pasturage for the lambs and at the same time enriches the soil. When sown for hay or seed crop they may be drilled in with corn planter, requiring about three pecks to the acre.



Cow Peas No other crop is so well adapted to renovating old and clay soil. It will produce a crop on ground where clover will no longer grow. Cow Peas sown broadcast and disked in after the early oats are cut will furnish a splendid pasture or furnish a fine crop of hay besides restoring nitrogen to the soil. **Prices quoted on application.**

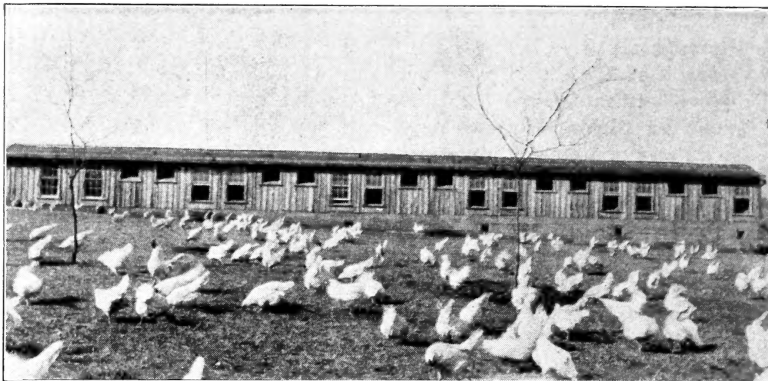
Sweet Corn For years we have been growing two most excellent varieties of Sweet Corn for our own table use, and last season we put away a small quantity of seed—thinking perhaps some of our customers would relish some of this “Corn on the Cob.” There is no finer dish than roasting ears during the harvest season. Plant a few rows in your garden this year. **PRICES—“COUNTRY GENTLEMAN” or “FUNKS EVERGREEN”**
Quart, 25 cts.; one-half peck, 60 cts.; peck, \$1.00; bushel, \$3.00.

Millet During the summer you may be short on hay and if so, Millet is a good substitute. It can be sown after oat harvest by disking and drilling in oat stubble. Ripens in fall for hay before frost.

Wheat Funks Turkey Red Wheat has been thoroughly tested year after year and found the most consistent yielder. We grow over 1000 acres of this wheat every year on the Funk Farm. Send for circular on wheat and price list.

During the fall we can furnish you Winter Rye for winter and early spring pasture, and we handle Barley, Speltz, Buckwheat, Broom Corn, Sugar Cane seed, Kaffir Corn and Vetch. Of course we don't grow all of these seeds but we are always in a position to know where the best seed can be obtained and we will gladly look after your wants if you will write us for prices.

Poultry and Live Stock Depts.



One of our large modern Poultry Houses. We breed White Leghorns because they produce eggs during the winter.

Our poultry farm consists of **2000 Rose Comb White Leghorn fowls**. We call particular attention to the care we take in our matings with regard to improving the laying strains of our hens. 600 of our best laying females^s are mated with the best males we can buy, consequently settings from our pens are bred "to lay." The price of these eggs is \$2.00 per setting of 15; \$10.00 per hundred; \$80.00 per thousand. We have no pullets or hens for sale this season, but we sell strong, vigorous cockerels at \$2.50 each. We also raise full bred Toulouse Geese and are prepared to furnish eggs from this flock for setting during the season at the uniform price of 30c each.

Address all Poultry communications to FUNKS EGG FARM, McLean, Ill.

500 Chester Whites At the International Live Stock Expositions of 1904-5-6-7-8-9 we have won 77 prizes on cattle, hogs, and sheep, besides Four Grand Champions and Five Championships. In 1907 our Chester White Hogs won Grand Champion and three first premiums over all breeds in all three dressed carcass classes. At the Indiana State Fair, 1909, one of our herd boars, BILLY T., won Grand Champion over 18 contestants and at the Illinois State Fair, 1909, our aged sow, LEOTORA, carried off the championship of Illinois. At Kentucky State Fair, 1910, our big boar, PHIL KARR, won Grand Champion, and we owned the sire of the Grand Champion Barrow in the dressed carcass contest over all breeds at the International of 1910. At Illinois State Fair, 1912, our sow FUNK'S JUDY II, won Grand Championship.

Berkshires Our herd now consists of about 100 head of the leading families of Berkshires. We feel that it is unnecessary for us to proclaim their merits because those who know the breeds realize what they are and those who do not know should find out from experience.

Shropshire Sheep Our flock consists of imported rams and ewes of our own importation and foundation stock from the leading breeders of England, Canada, and the United States—Mansell, Minton, Nocks, Gwynne, Cartwright, Cooper, Gibson, Davison and other flocks represented. Space does not permit in a seed catalogue to go into details of our work in Live Stock breeding. Those interested should visit our farms and personally inspect the stock we have to offer and we shall be pleased to afford every facility for such examination. We invite correspondence from those unable to visit us. Kindly state your wants plainly to avoid extra correspondence and delay.

Address

LIVE STOCK DEPT., Funk Bros. Seed Co., BLOOMINGTON, ILL.



Chester White Brood Sows on the Funk Farms.

TERMS: While we exercise the greatest care, to have our seeds pure, true and reliable, we do not give any warranty, expressed or implied, and are in no way responsible for the crop.

Special. Previous to shipping, samples from each variety of corn, oats and other seeds are carefully tested for germination. We cannot send free samples of ear corn. Extra fancy ears of any variety will be sent postpaid for 50c, if remittance accompanies the order. All goods are shipped subject to your approval on arrival. All orders are subject to confirmation by home office.

Our seeds are put up in substantial boxes and bags and delivered to the railroads from which we receive a receipt that they are in good order. Our responsibility ceases here. When goods arrive at destination in bad order, bags torn or boxes broken and contents leaking, do not accept the goods or pay freight on same until station agent makes out a statement to that effect on your receipted freight bill, which you should hold. You should at once put in claim to railroad for any loss or damages.

Our seeds are shipped with the understanding that you may have ten days after their arrival to make such tests as you may desire. If within that time they are found to be unsatisfactory, they are to be returned at once in original packages at our expense, and we will refund your money.

We cannot return money for any order that has been in your hands longer than ten days.

Prices are F.O.B. Bloomington or Funks Grove, Illinois.

Remittance MUST accompany each order.

Ear corn 70 pounds per bushel, net.

Shelled corn 56 pounds per bushel, net.

We make every effort to fill orders the same day received. If you wish us to hold your order in our seed house until planting time, kindly advise us to that effect.

FUNK BROS. SEED CO., Bloomington, Ill.

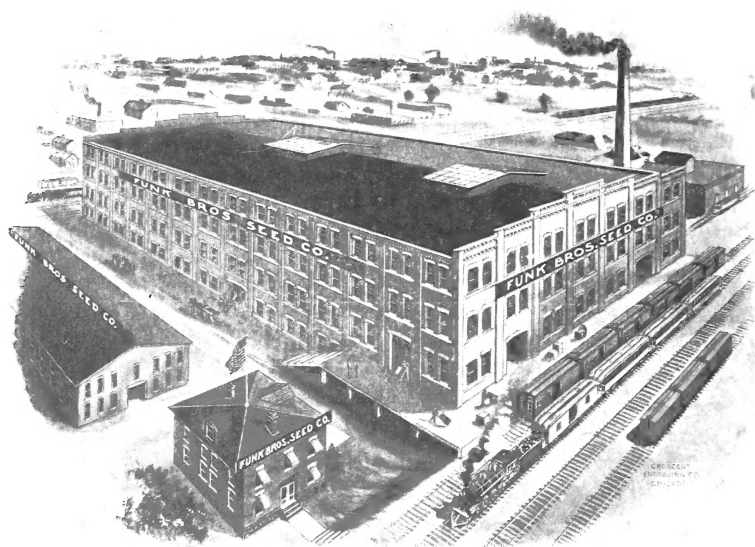
Additional Farm Facts

Frequently parties write to us asking how many pounds are required to make a bushel of various farm seeds and how much to sow to the acre. Below we give this information and if you will carefully preserve these Farm Facts, you will always have this table to refer to.

	Sow Per Acre	Weight Per Bu.		Sow Per Acre	Weight Per Bu.
Alfalfa	20 lbs.	60 lbs.	Peas, Cow	1½ to 3 bu.	60 "
Alsike or Hybrid Clover	8 to 12 lbs.	60 "	Red Clover	10 lbs.	60 "
Beans, Soy	1½ to 3 bu.	60 "	Red Top	10 to 20 lbs.	14 "
Buckwheat	1 bu.	52 "	Rape, True Dwarf Essex	3 to 5 lbs.	60 "
Barley	2 bu.	48 "	Rye	1½ bu.	56 "
Blue Grass	40 lbs.	14 "	(Sow for nurse crop)	1 bu.	
Corn } Shelled	9 lbs.	56 "	Sweet Clover, Melilotus		
} Ear	12 lbs.	70 "	} Unhulled	20 to 25 lbs.	40 "
German or Golden Millet	50 lbs.	50 "	} Hulled	15 lbs.	60 "
Hungarian Millet	48 lbs.	48 "	Timothy	8 to 12 lbs.	45 "
Japanese Millet (broadcast)	15 lbs.	40 "	Vetches, Spring	50 to 75 lbs.	60 "
(In drills)	10 to 12 lbs.		Vetches, Winter	45 to 50 lbs.	60 "
Kentucky Blue Grass	40 lbs.	14 "	Wheat	2 to 2½ bu.	60 "
Orchard Grass	20 to 25 lbs.	14 "	White Clover	8 lbs.	60 "
Oats	2 to 2½ bu.	32 "			
Peas, Canada Field	1½ to 2 bu.	60 "			

OUR BLOOMINGTON WAREHOUSE AND OFFICE

Located at Bloomington, Illinois



We Are so Located that Our Customers Get Prompt Delivery
With No Transfer Charges

We Ship Over Five Railroads

CHICAGO & ALTON
BIG FOUR
ILLINOIS TRACTION SYSTEM AND THEIR CONNECTIONS

LAKE ERIE & WESTERN
ILLINOIS CENTRAL

